Environmental Nanotechnology, Monitoring & Management

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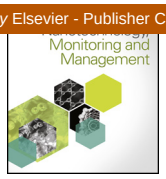

Editorial

First issue ENMM

Over the last few years, the level of attention given to environmental pollution issues and the consequent negative effects on human health has greatly increased, not only for water but particularly for mineral and biological matrices. The efforts have been not only devoted to traditional contaminants but more and more with emergent, largely unregulated chemicals and nanomaterials. Because of the natural disconnect between synthesis of new chemicals and the creation of a regulatory framework that will provide environmental sustainability we are often faced with the question on how to mitigate the impact of a newly detected compound in our waste streams. Inevitably we face the problem of looking for an unknown and developing a solution for a problem that is always new and incredibly challenging.

High impact international scientific journals are laden with studies dealing with promising new cutting-edge analytical tools for the detection of contaminants at trace levels and the design, testing and implementation of technologies for the treatment of different kinds of waste streams. These advances are mainly fueled by the true synergistic combination of discoveries in the areas of analytical chemistry, material chemistry and treatment technologies but most of these investigations are at a laboratory level and are quite often barely at a proof of concept scale. Although this is a vital phase, the results obtained are far from being viable for full-scale applications.

It is at this stage that the results of emerging new technologies, albeit still on a lab scale, should be timely shared among the worldwide scientific community.

The new open access Elsevier journal *Environmental Nanotechnology, Monitoring and Management, ENMM*, has been developed to foster and inspire a lively and timely debate, able to bring about new ideas for the development and improvement of such new technologies, in particular nanotechnologies, and, at the same time, to establish how appropriate they could be to curb environmental impact, protect human health and preserve environmental sustainability.

Another strategic tool for fulfilling these aims is reporting on the results of - judicious objective monitoring programs for macro- and microcontaminants across environmental compartments. Thanks to these, our knowledge about "the status and quality" of environmental systems could be assessed timely and properly. These assessment activities constitute the prologue and the tool making for the process of environmental and resource management. In this context, *ENMM* provides the unique opportunity to publish scientific contributions from the discussion of novel analytical methods for emerging contaminants and technologies, of the assessment of pollutant fate and transport and the development of management strategies for impacted systems.

ENMM will also be open to contributions related to regulatory issues, the need to introduce new treatment technologies, and the disposal of liquid and solid wastes. The reporting on case studies for local, regional or nationwide systems, proof of concept technologies branching into pilot scale and full implementations in this area is not only critical but highly encouraged.

We are honored to have the chance to start up this editorial project and we would like to conclude our editorial with the words of Nobel Prize winner Richard Feynman, in the John Danz Lectures Series at the University of Washington in 1963, since we believe they reflect the ideas from which ENMM was born:

> *"Science means, sometimes, a special method of finding things out. Sometimes it means the body of knowledge arising from the things found out. It may also mean the new things you can do when you have found something out, or the actual doing of new things."*

Let's find things out, create solutions, improve them and pass them on.

Paola Verlicchi*
Department of Engineering, University of Ferrara, Via Saragat 1, I-44122 Ferrara, Italy

Piero R. Gardinali
Department of Engineering, University of Ferrara, Via Saragat 1, I-44122 Ferrara, Italy
Department of Chemistry and Biochemistry, Florida International University, 3000 NE 151th Street, FL 33181, Miami, USA

* Corresponding author. Tel.: +390532974938; fax: +390532974870.

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